

REMARKS

There are 18 claims pending in the application.

Applicant has amended claims 4, 16, 18 and 27.

Claims 16 and 27 are independent.

Claim Rejections 35 U.S.C. § 102

Claims 16-22 and 25 are rejected under 35 U.S.C. § 102(e) as being anticipated by C.D. Bowers in US Patent Application 2003/0203342 entitled "Method and System for Computer Based Testing using Customizable Templates" (hereinafter Bowers)

Bowers teaches to a system for computer-based testing that includes a template module that stores presentation format information and a data module that stores the data content of the test. The method includes retrieving the presentation format information from a template module, the presentation format information dividing the display device into a predetermined number of areas in a predetermined arrangement, retrieving data content information from a data module, and combining the presentation format information and the data content information to create the presentation format and data content of the test.

Bowers, in "I. Overview of Computer Based Test Delivery System" (page 6, [[0092-0096]]), teaches the test specification is authored and stored in examination source files. Amongst these examination source are XXL files which are of unassigned format. XXL files contain, for example, client's test requirements, test items or questions, templates determining physical appearance, plugins, and any additional data necessary to implement the test. The plugins allowing the test designer to customize the behaviour of the test and preferably written using Microsoft Visual C++ or Visual Basic 6.0 or any fully COM enabled language.

Likewise, in the same section but in relation to Figure 6 (page 7, [0102]), Bowers teaches that the files relating to the visual presentation of the test on the display device are HTML files.

Referring to independent claim 16 Applicant recites “the namespace including a prefix identifying the collection of user interface control elements as part of the extended presentation markup language and allowing a presentation markup language parser to identify them as part of the DOM.” Whilst Bowers (page 16, [0182]) describes a name comprising a prefix, being one of a plurality of prefixes associated with different events, and relating to the order of events within the test. They are not prefixes allowing a presentation markup language parser to identify a user interface control element as part of an extended presentation markup language, and thereby determining whether the presentation markup language parser processes the user interface control element.

Applicant further recites “generating a function name for the located user interface control element following a predetermined naming convention comprising adding the prefix to a unique name associated with the located user interface control element.”

As noted *supra* Bowers teaches prefixes only in association with defining events that will occur during the test performed and does not teach prefixes being used function names relating to a user interface control element that will form part of the displayed web application wherein the prefix determines whether they are parsed.

Applicant further recites “calling a predetermined set of user interface control instructions associated with the located user interface control element using the generated function name.” As noted *supra* Bowers teaches to prefixes as defining events during a test and not to prefixes relating to user interface control elements defined as part of an extended presentation markup language wherein instructions are called in a web application based upon the function name.

Applicant further recites “the predetermined set of user interface control instructions defining the behaviour of the located user interface control element and comprising a first portion relating uniquely of the located user interface control element, a second portion commonly relating to

multiple user interface control elements, and an attribute relating to a skin template for controlling the display of the located user interface control.” Bowers teaches to multiple formats including HTML, XML, MP3, JPEG, etc to generate the test. Bowers does not teach:

- a set of instructions defining behaviour of a control element in a web application through user interface control instructions;
- a portion of the instructions being uniquely associated to the located user interface control element and therein to the function name;
- a second portion of the user interface control instructions being common and associated with multiple user interface control elements;
- a skin element for controlling the display of a user control interface.

Applicant further recites “rendering the DOM of the web application described in the extended presentation markup language, including rendering the located user interface control of the web application based on at least the predetermined set of user interface control instructions.” As discussed *supra* Bowers does not teach to a predetermined set of user interface control instructions having the structure as recited by Applicant nor to rendering a user interface control using these instructions.

Applicant respectfully submits that data files, XML files, multimedia files, and HTML files as taught by Bowers in respect of providing the elements of the test to be displayed to the user do not comprise “document object model (DOM) of the web application.” Rather Bowers teaches to data that is used by a web application.

Accordingly, Applicant respectfully traverses the rejection in respect of independent claim 16 on the grounds that the recited limitation is not taught by the recited prior art.

Referring to dependent claim 17 Applicant recites “traversing each node in the document object model, and determining whether the node has a name which matches a designated naming convention.” As noted Bowers does not teach to a DOM or to determining whether nodes within

the DOM have names matching a designated naming convention. Bowers teaches to generating tests through standard file formats that are called specifically from the test application such that there is no requirement for identifying files having names matching a naming convention.

Accordingly, Applicant respectfully traverses the rejection in respect of dependent claim 17 on the grounds that the recited limitation is not taught by the recited prior art and that the claim is dependent upon independent claim 16 and thereby dependent upon allowable subject matter.

Now referring to claim 18 Applicant recites “dynamically generating a function name associated with the designated element.” As noted *supra* Bowers does not teach to generating function names that form part of an extended presentation markup language.

Applicant further recites “passing an object associated with the designated control element as a parameter of the generated function name, retrieving the attributes of the object, and performing a function stored in memory having the generated function name.” Applicant has considered the cited references in Bowers by the Examiner in respect of these limitations and respectfully disagrees that these recited limitations are taught.

Accordingly, Applicant respectfully traverses the rejection in respect of dependent claim 18 on the grounds that the recited limitation is not taught by the recited prior art and that the claim is dependent upon independent claim 16 and thereby dependent upon allowable subject matter.

Referring to dependent claim 19 Applicant recites “determining if the name of the designated element contains a designated prefix” and “generating a function name comprising of the name of the designated element.” Bowers does not teach to determining whether designated elements contained designated prefixes and as noted *supra* does not teach to generating names of functions forming part of an extended presentation markup language.

Applicant also recites “assigning an object associated with the designated element as the parameter of the function name, and assigning the control instructions of the designated element as steps for the function to perform.” Applicant has considered the cited references identified in Bowers in respect of these limitations and respectfully disagrees with the Examiner that these recited limitations are taught.

Accordingly, Applicant respectfully traverses the rejection in respect of dependent claim 19 on the grounds that the recited limitation is not taught by the recited prior art and that the claim is dependent upon independent claim 16 and thereby dependent upon allowable subject matter.

Referring to dependent claim 20 Applicant recites “searching for a control attribute of an user interface control element in the document object model, and calling control attribute instructions associated with the control attribute.” Applicant has considered the cited references identified by the Examiner in respect of these limitations and respectfully disagrees with the Examiner that these recited limitations are taught.

Accordingly, Applicant respectfully traverses the rejection in respect of dependent claim 20 on the grounds that the recited limitation is not taught by the recited prior art and that the claim is dependent upon independent claim 16 and thereby dependent upon allowable subject matter.

Now referring to dependent claim 21 Applicant recites “searching attributes of the user interface control element in the document object model, and determining whether the attribute has a name which follows a designated naming convention.” As noted *supra* Bowers does not teach to a DOM nor does Bowers teach to determining whether an attribute forming part of a control attribute of a user interface control element follows a designated naming convention.

Accordingly, Applicant respectfully traverses the rejection in respect of dependent claim 21 on the grounds that the recited limitation is not taught by the recited prior art and that the claim is

dependent upon independent claim 16, via dependent claim 20, and thereby dependent upon allowable subject matter.

Referring to claim 22 Applicant recites “determining if the name of the control attribute includes a designated prefix”, “generating a function name comprising the name of the control attribute”, “assigning an object associated with the control attribute as the parameter of the function name”, and “assigning the control attribute instructions of the designated attribute as steps for a function having the function name to perform.” Applicant has noted *supra*, in respect of claim 19, that Bowers does not recite these recited limitations.

Accordingly, Applicant respectfully traverses the rejection in respect of dependent claim 22 on the grounds that the recited limitation is not taught by the recited prior art and that the claim is dependent upon independent claim 16 and thereby dependent upon allowable subject matter.

Now referring to claim 25 Applicant recited “adding a behavior element as a child of a user interface control element, receiving an event which is equal to an event attribute setting in the behavior element, and calling behavior element instructions associated with the behavior element.” Applicant has considered the cited references identified by the Examiner in Bowers in respect of these limitations and respectfully disagrees with the Examiner. Bowers does not teach to adding behaviour elements as children of user interface control elements and calling instructions associated with this element based upon receiving an event equal to an attribute setting within the behaviour element.

Accordingly, Applicant respectfully traverses the rejection in respect of dependent claim 22 on the grounds that the recited limitation is not taught by the recited prior art and that the claim is dependent upon independent claim 16 and thereby dependent upon allowable subject matter.

Claim Rejections 35 U.S.C. § 103

Claims 4-9, 11-13 and 27 are rejected under 35 U.S.C. § 103(a) as being obvious and unpatentable in view of C.D. Bowers in US Patent Application 2003/0203342 entitled “Method and System for Computer Based Testing using Customizable Templates” (hereinafter Bowers)

Referring to independent claim 27 recites “a namespace for associating user interface control element with user interface control, the namespace including a prefix for identifying as part of the extended presentation markup language and having names following a predetermined naming convention and allowing a parser to identify them as part of a document object model (DOM) of the web application.” As discussed *supra* Bowers does not teach to a namespace for user interface control elements that allow a parser to identify such user interface control elements as being part of a DOM for the web application.

Applicant also recites “a set of core attributes common to all of the user interface control elements in the collection of user interface control elements.” Bowers does not teach to a set of attributes that are common to all user interface controls elements associated to a web application.

Applicant also recites “a collection of skin templates associated with user interface control elements through one of the core attributes of the user interface control elements, each of the skin templates describing how to display the user interface control element, each of the skin templates described in the presentation markup language.” Bowers does not teach to skin templates that describe how to display user interface control elements. Rather Bowers teaches to a series of predetermined regions of a display and establishing the content of each through examination source files that include data files, XXL files, multimedia files, and HTML files.

Applicant further recites “traversing each node in the DOM of the web application searching for a node identified by the prefix of the namespace associated with the user interface control elements.” As noted *supra* Bowers does not teach to a DOM nor does Bowers teach to identifying nodes within the DOM based upon a prefix of the namespace.

Also recited by Applicant is “generating a function name based on the namespace comprising adding the prefix to a unique name associated with the user interface control element of the identified node.” As noted *supra* Bowers does not teach to generating function names that form part of an extended presentation markup language. Bowers teaches to naming based position in the event sequence of a test not to allow a presentation markup language parser to identify the function as part of the DOM.

Applicant further recites “a predetermined set of user interface control instructions defining the behaviour of the located user interface control element comprising a first portion relating uniquely to the located user interface control element, a second portion commonly relating to multiple user interface control elements, and an attribute relating to a predetermined skin template of the collection of skin templates for the user interface control.” As noted *supra* Bowers does not teach to these limitations. Bowers teaches to the test having a predetermined arrangement of windows and does not teach to a skin element for controlling the display of a user control interface.

Accordingly, Applicant respectfully traverses the rejection in respect of independent claim 27 on the grounds that the recited limitation is not taught by the recited prior art.

Applicant respectfully traverses the rejections in respect of dependent claims 4 to 9 on the grounds that claims are dependent upon independent claim 27 and thereby dependent upon allowable subject matter.

Referring to claim 11 Applicant recites “the core attributes comprise state attributes for specifying the identification of a <state> child element of the user interface control element.” Bowers does not teach to identifying elements of a user interface control element that is a child thereof.

Accordingly, Applicant respectfully traverses the rejection in respect of dependent claim 11 on the grounds that the recited limitation is not taught by the recited prior art and that the claim is dependent upon independent claim 27 and thereby dependent upon allowable subject matter.

Applicant respectfully traverses the rejections in respect of dependent claims 12 and 13 on the grounds that claims are dependent upon independent claim 27 and thereby dependent upon allowable subject matter.

In view of the foregoing, Applicant respectfully submits that the independent claims patently define the present invention over the citations of record. Further, the dependent claims should also be allowable for the same reasons as their respective base claims and further due to the additional features that they recite. Separate and individual consideration of the dependent claims is respectfully requested.

Applicant believes that the present Amendment is responsive to each of the points raised by the Examiner in the Office Action. However, if there any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to such matters.

There being no further outstanding objections or rejections, it is submitted that the present application is in condition for allowance. An early action to that effect is courteously solicited.

Respectfully submitted,

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